



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/866,259

05/25/2001

James Ching-Shau Yik

24252

5515

57286

7590

04/29/2008

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

600 Galleria Parkway, Suite 1500

ATLANTA, GA 30339-5948

EXAMINER

TOLENTINO, RODERICK

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

04/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/866,259	Applicant(s) YIK ET AL.	
	Examiner Roderick Tolentino	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 20 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 3, 4, 5, 6, 7, 10 and 13 have been considered but are moot in view of the new ground(s) of rejection, as necessitated by amendment by applicant on 02/05/2008

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3 – 7 and 10 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman et al. U.S. Patent No. (6,069,889) in view of Anderson et al. U.S. PG-Publication No. (2003/0014665) and Strongin et al. U.S. PG-Publication No. (2002/0147916).

5. As per claims 1, 3, 4, 5, 6, 7, 10 and 13, Feldman teaches a plurality of communications ports (Feldman, Col. 5 Lines 13 – 20, multiple ports used), a switching database having a plurality of switching entries, each one of the plurality of switching entries specifying an association between a data network node identifier and a communications port (Feldman, Col. 5 Lines 13 – 24, router devices with routing

Art Unit: 2134

database where identifiers relate to communications port) but fails to teach, a plurality of switching entry protection flags, each one of the plurality of switching entry protection flags being associated with a switching entry and a controller executing a secure switching database update process, whereby an attempt by a hostile data network node to effect a modification of a protected switching entry is prevented when the protection flag is set, enabling the data switching node to operate securely concurrently in friendly and hostile data networking environments and corresponding to the plurality of switching entries, each of the plurality of switching entry protection flags configured with a predetermined value that determines whether each of the switching entries is protected from update and a controller executing a secure switching database update process, for at least one of the switching entries, wherein executing a secure switching database update process includes determining, from at least one of the switching entry protection flags, whether the at least one of the switching entries is protected from update. However in an analogous art Anderson teaches a plurality of switching entry protection flags, each one of the plurality of switching entry protection flags being associated with a switching entry (Anderson, Paragraph 0025, notification triggers security authentication) and a controller executing a secure switching database update process, whereby an attempt by a hostile data network node to effect a modification of a protected switching entry is prevented when the protection flag is set, enabling the data switching node to operate securely concurrently in friendly and hostile data networking environments (Anderson, Paragraph 0026, updates routers when attacked) and Strongin teaches corresponding to the plurality of switching entries, each of the plurality

Art Unit: 2134

of switching entry protection flags configured with a predetermined value that determines whether each of the switching entries is protected from update (Strongin, Paragraph 0046, protection table for memory addresses where certain entries are protected from updates), and a controller executing a secure switching database update process, for at least one of the switching entries, wherein executing a secure switching database update process includes determining, from at least one of the switching entry protection flags, whether the at least one of the switching entries is protected from update (Strongin, Paragraph 0046, protection table for memory addresses where certain entries are protected from updates).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Anderson's apparatus for secure automated response to distributed DOS attacks with Feldman's aggregation of data flows on switched network paths because it offers the advantage of quick and automated response upon the detection of an attack (Anderson, Paragraph 0025).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Strongin's method for securing portions of memory with Feldman's aggregation of data flows on switched network paths because it offers the advantage of using protection mechanisms to protect the integrity of security of operating systems (Strongin, Paragraph 0004), further Strongin's protection table is used in combination with the router and memory in Feldman's invention, one of ordinary skill in the art would see the combination of using protection tables to protect from unauthorized changes to the memory table).

6. As per claim 11, Feldman in view of Anderson teaches a step of suppressing the replications of the data traffic to the source communications port (Anderson, Paragraph 0026, Data filters suppress information to certain destinations).

7. As per claim 12, Feldman discloses suppressing the replication of the data traffic to communications ports having the associated unknown destination flood control bit set Anderson, Paragraph 0026, Data filters suppress information to certain destinations).

8. As per claim 14, Feldman discloses a step of suppressing the replication of the data traffic to the source communications port Anderson, Paragraph 0026, Data filters suppress information to certain destinations).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Feldman et al. U.S. Patent No. (6,069,889), Anderson et al. U.S. PG-Publication No. (2003/0014665) and Strongin et al. U.S. PG-Publication No. (2002/0147916), and in further view of Civanlar et al. U.S. Patent No. (5,996,021).

10. As per claim 2, Feldman fails to teach the communication ports are represented in the switching entries via port identifiers. However, in an analogous art Civanlar teaches the communication ports are represented in the switching entries via port identifiers (Civanlar, Col. 9 Lines 6 – 26).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Civanlar's Internet protocol relay network with Feldman's aggregation of data flows on switched network paths because it offers the advantage of

PORT ID fields having local significance depending on the particular IPRR and the destination of the IP Packet (Civanlar, Col. 9 Lines 6 – 26).

11. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Feldman et al. U.S. Patent No. (6,069,889), Anderson et al. U.S. PG-Publication No. (2003/0014665) and Strongin et al. U.S. PG-Publication No. (2002/0147916), and in further view of Lubarsky et al. U.S. Patent No. (4,893,340).

12. As per claim 8, Feldman fails to teach the topology discovery disable flag is associated with the source communications port. However, in an analogous art Lubarsky teaches the topology discovery disable flag is associated with the source communications port (Lubarsky, Col. 24 Lines 13 – 27).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Lubarsky's multijunction unit apparatus for a digital network with Feldman's aggregation of data flows on switched network paths because it offers the advantage of proper routing of information in a system.

13. As per claim 9, Feldman fails to teach the topology discovery disable flag is associated with all physical communications ports of the data switching node. However, in an analogous art Lubarsky teaches the topology discovery disable flag is associated with all physical communications ports of the data switching node (Lubarsky, Col. 24 Lines 13 – 27).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Lubarsky's multijunction unit apparatus for a digital

network with Feldman's aggregation of data flows on switched network paths because it offers the advantage of proper routing of information in a system.

14. Claims 15 – 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman et al. U.S. Patent No. (6,069,889) in view of Anderson et al. U.S. PG-Publication No. (2003/0014665) and Strongin et al. U.S. PG-Publication No. (2002/0147916) and in further view of Daniell et al. U.S. Patent No. (7,065,644).

15. As per claims 15 – 20, Feldman fails to teach an alarm configured for trigger if at least one of the switching entries is protected from update. However, in an analogous art Daniell teaches an alarm configured for trigger if at least one of the switching entries is protected from update (Daniell, Col. 6 Lines 62 – 67 and Col. 7 Lines 1 – 2, security application alerts administrator of unauthorized changes).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Daniell's system for protecting a security profile of a computer system with Feldman's aggregation of data flows on switched network paths because it offers the advantage of enforcing a set of rules that prevent unauthorized users from accessing or modifying applications (Daniell, Col. 1 Lines 20 - 23).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Tolentino whose telephone number is (571) 272-2661. The examiner can normally be reached on Monday - Friday 9am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2134

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roderick Tolentino
Examiner
Art Unit 2134

Roderick Tolentino
/R. T./
Examiner, Art Unit 2134

/Kambiz Zand/
Supervisory Patent Examiner, Art Unit 2134